

Patent claims

1.-7. (cancelled)

8. (new) A method for establishing an electrical connection using a detachable plug-in connection, the method comprising:

providing a contact element having a sectionally lengthwise-slotted shaft part, the shaft part having ribs arranged around its circumference;

providing a sleeve part adapted to surround the shaft part and covering the ribs, the sleeve part having two ends;

positioning the sleeve part essentially coaxially relative to the shaft part for covering the ribs by the sleeve part;

connecting the sleeve part to the shaft part at one of the ends by plugging the sleeve part over the shaft part;

twisting the shaft part around a central axis of the shaft part such that the ribs bend inwards towards the central axis, the bended ribs formed as arcs; and

locking the sleeve part to the shaft part at the other end, wherein the shaft part is held twisted against an elastic reset force caused by the ribs.

9. (new) The method according to Claim 8, wherein the sleeve part is locked onto to the shaft part by mechanical locking.

10. (new) The method according to Claim 8, wherein the sleeve part (30) is locked onto to the shaft part by laser welding.

11. (new) The method according to Claim 8, wherein a radial expansion protection ring extending around the circumference is pressed into the positioned sleeve part.

12. (new) The method according to Claim 9, wherein a radial expansion protection ring extending around the circumference is pressed into the positioned sleeve part.

13. (new) The method according to Claim 10, wherein a radial expansion protection ring extending around the circumference is pressed into the positioned sleeve part.
14. (new) The method according to Claim 8, wherein at least one radially extended section is formed on the contact element.
15. (new) The method according to Claim 9, wherein at least one radially extended section is formed on the contact element.
16. (new) The method according to Claim 10, wherein at least one radially extended section is formed on the contact element.
17. (new) The method according to Claim 11, wherein at least one radially extended section is formed on the contact element.
18. (new) The method according to Claim 8, wherein flat contact arrangements of the contact element, and if necessary of the sleeve part repeating at a defined spacing distance are punched out of a strip material, wherein the arrangements remain connected to a carrier tape of the strip material, wherein the punched-out contact arrangements are surface-treated, and wherein the contact element is formed from the contact arrangements by rolling the shaft part and bending up connection tabs and if necessary the sleeve part, is formed through rolling.
19. (new) The method according to Claim 9, wherein flat contact arrangements of the contact element, and if necessary of the sleeve part repeating at a defined spacing distance are punched out of a strip material, wherein the arrangements remain connected to a carrier tape of the strip material, wherein the punched-out contact arrangements are surface-treated, and wherein the contact element is formed from the contact arrangements by rolling the shaft part and bending up connection tabs and if necessary the sleeve part, is formed through rolling.

20. (new) The method according to Claim 10, wherein flat contact arrangements of the contact element, and if necessary of the sleeve part repeating at a defined spacing distance are punched out of a strip material, wherein the arrangements remain connected to a carrier tape of the strip material, wherein the punched-out contact arrangements are surface-treated, and wherein the contact element is formed from the contact arrangements by rolling the shaft part and bending up connection tabs and if necessary the sleeve part, is formed through rolling.

21. (new) The method according to Claim 11, wherein flat contact arrangements of the contact element, and if necessary of the sleeve part repeating at a defined spacing distance are punched out of a strip material, wherein the arrangements remain connected to a carrier tape of the strip material, wherein the punched-out contact arrangements are surface-treated, and wherein the contact element is formed from the contact arrangements by rolling the shaft part and bending up connection tabs and if necessary the sleeve part, is formed through rolling.

22. (new) The method according to Claim 14, wherein flat contact arrangements of the contact element, and if necessary of the sleeve part repeating at a defined spacing distance are punched out of a strip material, wherein the arrangements remain connected to a carrier tape of the strip material, wherein the punched-out contact arrangements are surface-treated, and wherein the contact element is formed from the contact arrangements by rolling the shaft part and bending up connection tabs and if necessary the sleeve part, is formed through rolling.

23. (new) The method according to Claim 18, wherein locating tabs and locating cutouts arranged in pairs are formed on a contact arrangement of the sleeve part, wherein, when the sleeve part is rolled, the locating tabs engage in the assigned locating cutouts to form a tight fit.